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ABSTRACT

A series of studies were conducted at Evergreen Valley College in San Jose, California, to evaluate the persistence of three groups of new mathematics students entering Arithmetic, Algebra, and Intermediate Algebra courses in the fall of 1988. In particular, the studies examined students' persistence from the initial mathematics course, Arithmetic, through Transfer Level Math (TLM), covering the four academic years from fall 1988 through spring 1992. In fall 1988, a total of 193 new students were enrolled in Arithmetic, 158 in Algebra, and 51 in Intermediate Algebra. Findings from the studies included the following: (1) among Arithmetic students, 7% progressed through TLM between fall 1988 and spring 1992, while 20% successfully completed Algebra, and 11% persisted through Intermediate Algebra; (2) Asian students were the only ethnic group in Arithmetic with more than 10% persisting through TLM; (3) among Algebra students, 10% progressed through TLM between fall 1988 and spring 1992, while 20% successfully completed Intermediate Algebra; (4) among Algebra students, Hispanics had the highest rates of persistence through TLM, while no Black students and no White female students persisted through TLM; (5) among Intermediate Algebra students, 25% persisted through TLM between fall 1988 and spring 1992, while 65% successfully completed Intermediate Algebra; (6) 36% of the Asian students in Intermediate Algebra, who comprised 55% of the total group, persisted through TLM; and (7) for the three groups, the studies indicated that the college is not meeting its goals in terms of transferring more underprepared students and protected ethnic groups. Detailed data tables are included. (PAA)

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EVERGREEN VALLEY COLLEGE

PERSISTENCE OF NEW COLLEGE STUDENTS
from
Arithmetic, Algebra and Int Algebra
through
TRANSFER LEVEL MATH

FALL 1988 - SPRING 1992

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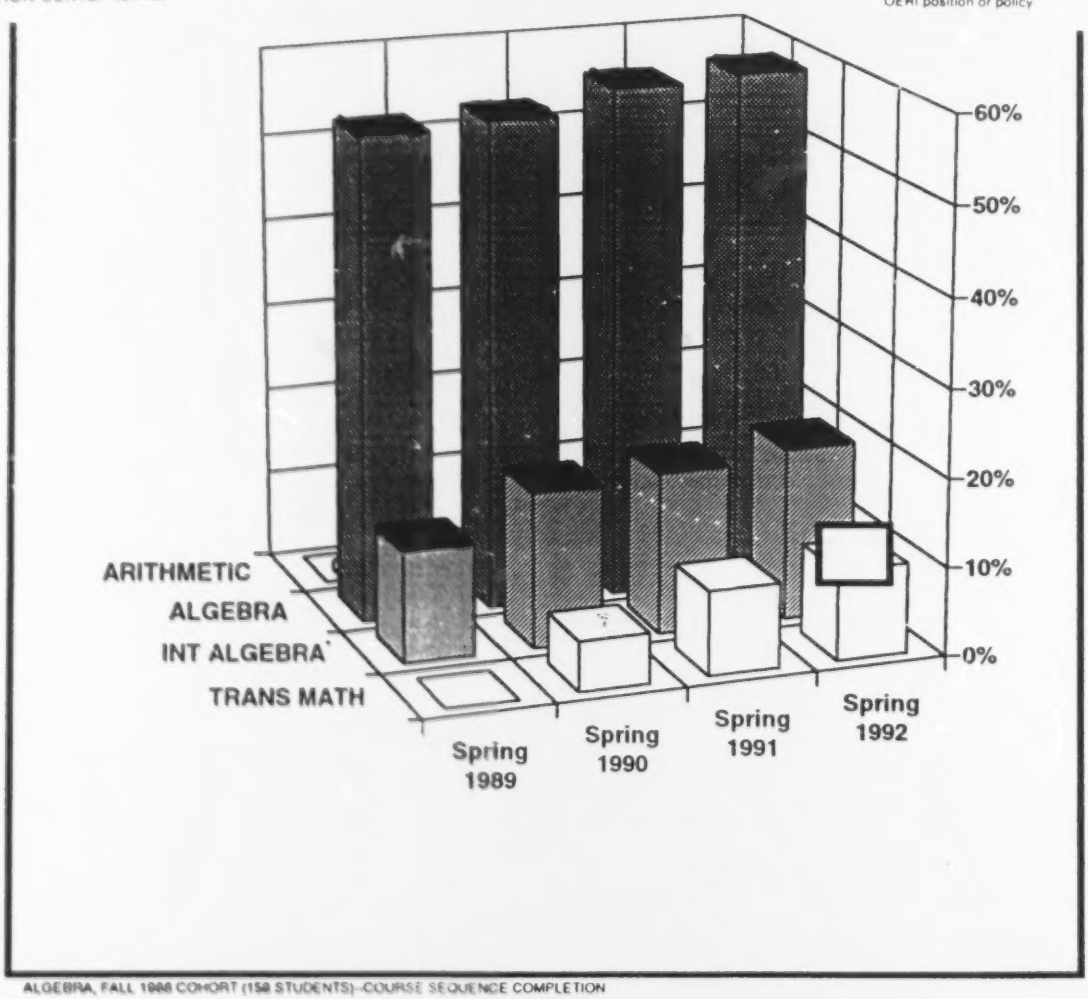

ALGEBRA, FALL 1988 COHORT (158 STUDENTS)--COURSE SEQUENCE COMPLETION

JC930066

Research Reports #261, #294, and #296.

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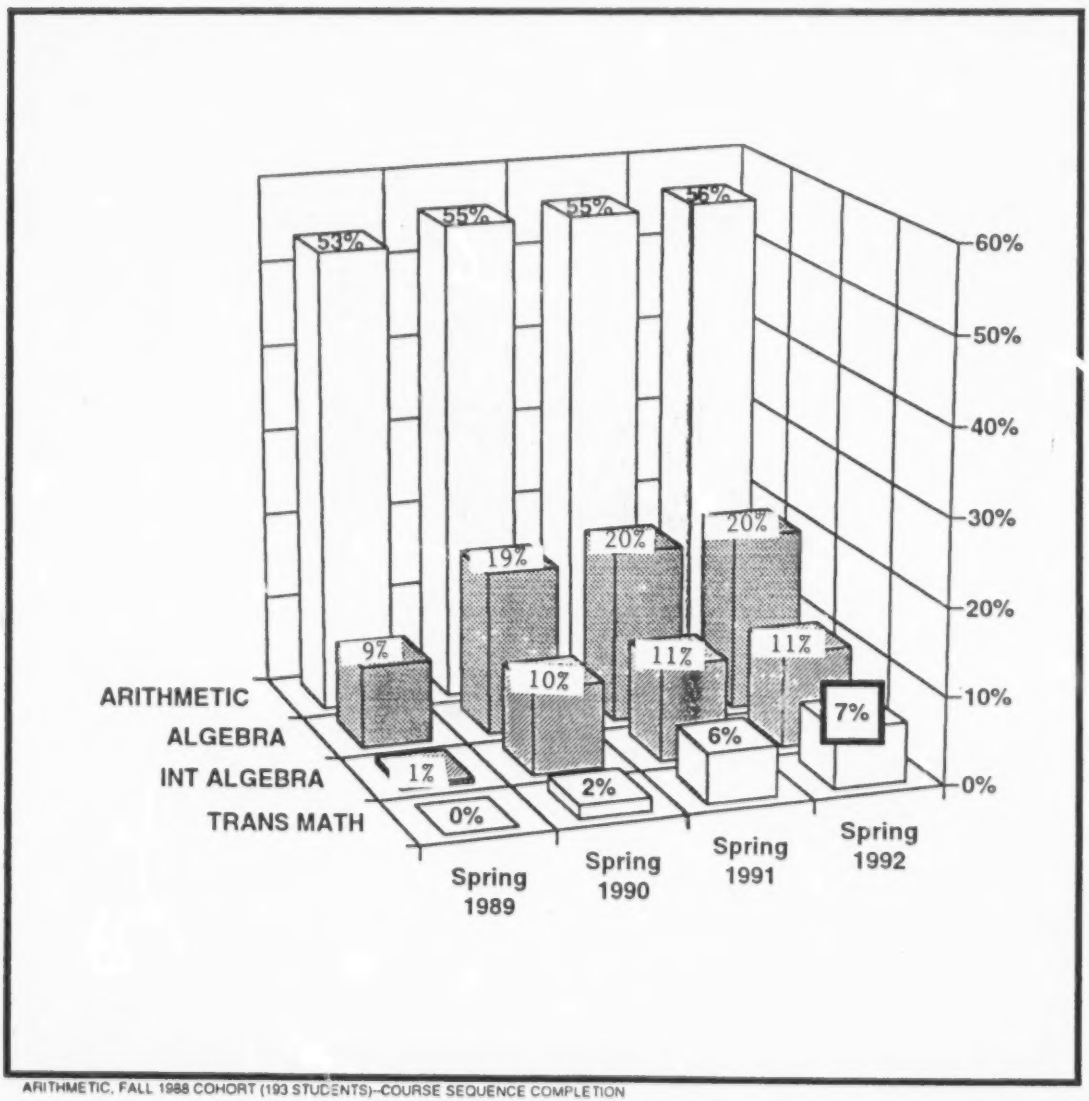
EVERGREEN VALLEY COLLEGE

PERSISTENCE OF NEW COLLEGE STUDENTS
from
ARITHMETIC
through
TRANSFER LEVEL MATH

FALL 1988 - SPRING 1992



ARITHMETIC, FALL 1988 COHORT (193 STUDENTS)–COURSE SEQUENCE COMPLETION

Background Information

Abbreviations

Ethnic Groups

IND = American Indian/Alaskan native
FIL = Filipino
BLK = Black
MID = Middle Eastern
PAC = Pacific Islander (Guam, Samoa, etc.)
ASN = Asian (Chinese, Japanese, Korean, Vietnamese, etc.)
HSP = Chicano, Latino, Mexican, Hispanic
WHT = White, non-Hispanic
OTH = Other non-White
DCL = Decline to state
UNK = Unknown

Benchmark Ethnic Groups

ASN = ASN + FIL + PAC
BLK = BLK
HSP = HSP
WHT = WHT
OTH = OTH + IND + MID

Note: DCL & UNK are not represented in the benchmark figures.

Other Abbreviations & Definitions

SJCC = San Jose City College
EVC = Evergreen Valley College
ARITHMETIC = Mathematics Level 1: Achieved by successfully completing three units of MATH 310 (Arithmetic) or equivalent course or appropriate test score
ALG = Mathematics Level 2: Achieved by successfully completing one of the following MATH classes: 11A, 11R or 12 (Algebra)
INT ALG = Mathematics Level 3: Achieved by successfully completing MATH 13 (Intermediate Algebra)
TRANS MATH = Transfer Level Math: Achieved by successfully completing one of the following MATH classes, designated as "B4" in the District Master Course Schedule (accepted for transfer by CSU): Math 21, 22, 25, 51, 52, 55, 60, 61, 62, 63, 70, 71, 72, 73, 78, 79, 81, 82
COMPETENCY = A, B, C, or CR grade in course or equivalent course
PERSISTENCE (PERS) = Successfully continuing to the next level after gaining competency in the previous level

Appendices

Detailed appendices are available upon request from the office of Academic Standards.

Funding

The prototype and template for this report were developed using Title III funds.

Project Author

Dr. Jon Kangas

Data Collection

Jennifer Drino
Tony Ma

Prototype & Template Creation, Document Preparation

Katheen Budros, Program Assistant

DATA HIGHLIGHTS

- Only 13 students, or 7%, of the 193 new students beginning in Arithmetic (Math 310) in Fall 1988 at EVC progressed through Transfer Level Math between Fall 1988 and Spring 1992.

- 56% of these 193 students beginning in Math 310 achieved competency in Math 310 (Math Level 1) within four academic years, 20% reached competency in Algebra (Math Level 2), and 11% achieved competency in Intermediate Algebra (Math Level 3).

- Asian was the only ethnic group with more than 10% of its members successfully persisting through Transfer Level Math.

- Asian Males and Asian Females were the highest ranking groups at 14% and 9%, respectively, to continue through Transfer Level Math within four academic years.

- No White Females and no Black, White or Other Males who started in Arithmetic completed Transfer Level Math within four academic years.

- 96% of the original group of 193 was non-White.

- Of the 193 students beginning in Math 310, Hispanic (38%) and Other (27%) comprised the largest ethnic groups. White, at 4%, comprised the smallest.

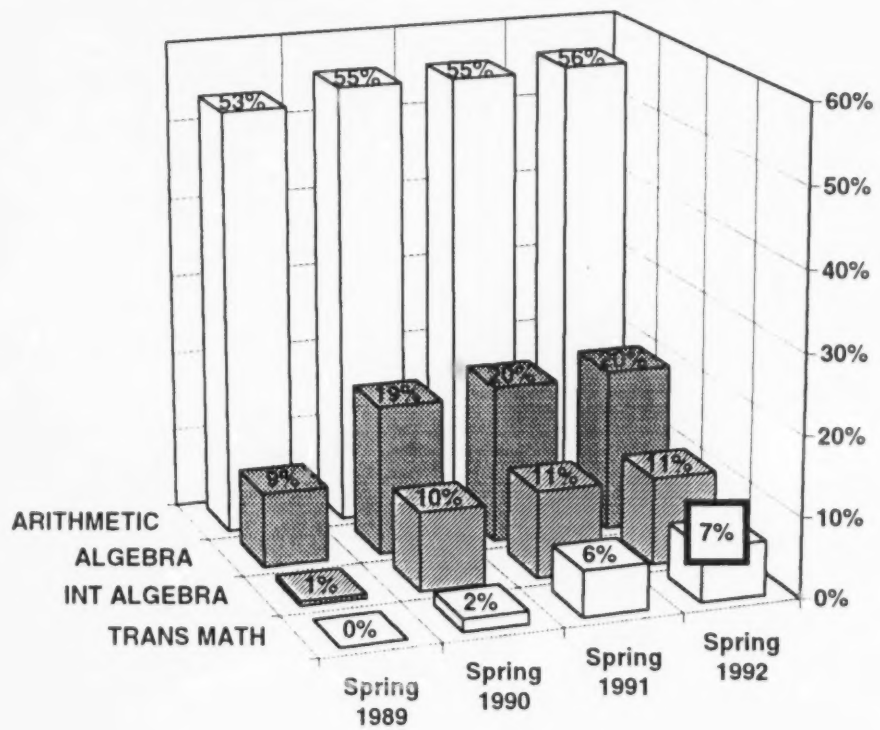
COMMENT: 96% of the Math 310 students were non-White. If one of the college's goals is to transfer more underprepared students and protected ethnic groups, this goal is not being met for the large percentage of students entering at the Arithmetic level.

RECOMMENDATION: It is recommended that an individual educational plan be developed for students at the Math 310 level using the expertise of as many relevant professionals as possible, e.g., career specialist, learning disabilities specialist, job developer, social worker, counselor, etc. Packaging this in a guidance class could be a practical approach.

Question: **What percentage of new college students who started in ARITHMETIC at EVC in FALL 1988 persisted through TRANSFER LEVEL MATH within four academic years?**

Cumulative Persistence from ARITHMETIC through TRANSFER LEVEL MATH

		ARITHMETIC	ALGEBRA	INT ALGEBRA	TRANS MATH	
	Spring 1989	53%	9%	1%	0%	
	Spring 1990	55%	19%	10%	2%	
	Spring 1991	55%	20%	11%	6%	
	Spring 1992	56%	20%	11%	7%	



ARITHMETIC, FALL 1988 Cohort = 193

Low numbers necessitate caution in interpreting data.

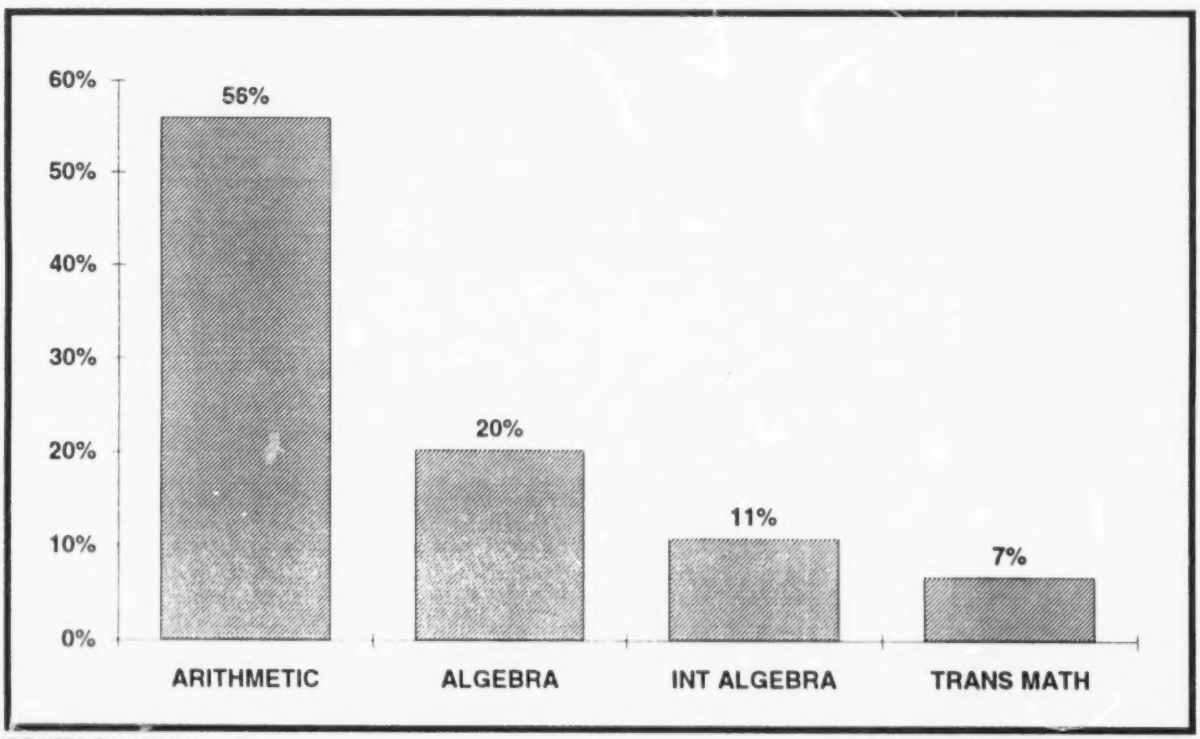
Answer: **7%** of the original FALL 1988 group persisted through TRANSFER LEVEL MATH within four academic years.

Question: **What are the cumulative ARITHMETIC and higher level MATHEMATICS competency rates over four academic years of new college students who started in ARITHMETIC at EVC in FALL 1988?**

Cumulative Percentage by Semester

	FALL 1988	F88	S89	Su89	F89	S90	Su90	F90	S91	Su91	F91	S92
	Cohort	%	%	%	%	%	%	%	%	%	%	%
ARITHMETIC	193	51%	53%	54%	55%	55%	55%	55%	55%	55%	56%	56%
ALGEBRA		0%	9%	11%	17%	19%	18%	19%	20%	20%	20%	20%
INT ALGEBRA		0%	1%	2%	4%	10%	10%	11%	11%	11%	11%	11%
TRANS MATH		0%	0%	0%	1%	2%	2%	5%	6%	6%	6%	7%

CUMULATIVE COMPETENCY RATES FOR ARITHMETIC AND HIGHER MATH AFTER FOUR ACADEMIC YEARS (Spring 1992)



ARITHMETIC, FALL 1988 Cohort = 193

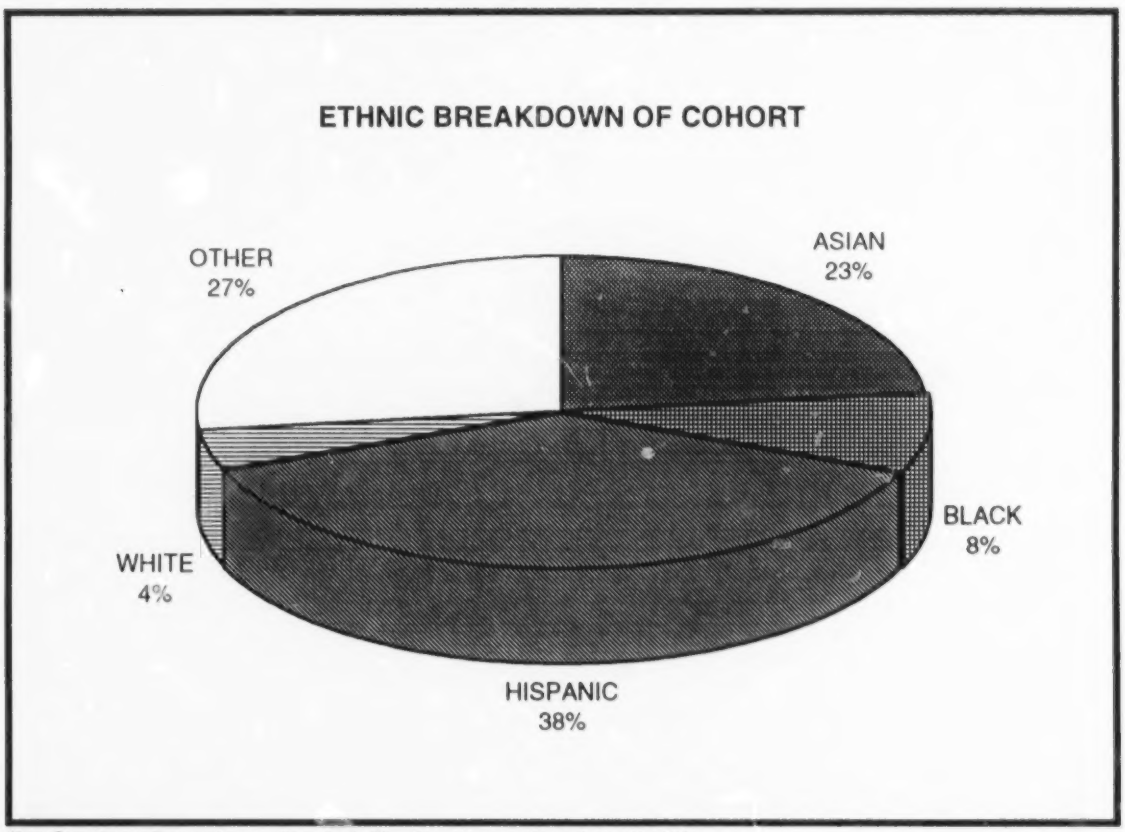
Low numbers necessitate caution in interpreting data.

Answer: After four academic years, the cumulative competency rates for new college students who began in FALL 1988 in ARITHMETIC were as follows:

ARITHMETIC	56%
ALGEBRA	20%
INT ALGEBRA	11%
TRANSFER LEVEL MATH	7%

QUESTION: **What was the benchmark ethnic breakdown of new college students who started in ARITHMETIC at EVC in FALL 1988?**

FALL 1988 COHORT		
GROUP	#	%
ASIAN	45	23%
BLACK	16	8%
HISPANIC	72	37%
WHITE	8	4%
OTHER	52	27%
TOTAL	193	100%



Note: Computer rounding sometimes results in slightly different percentages on the pie chart and the table.

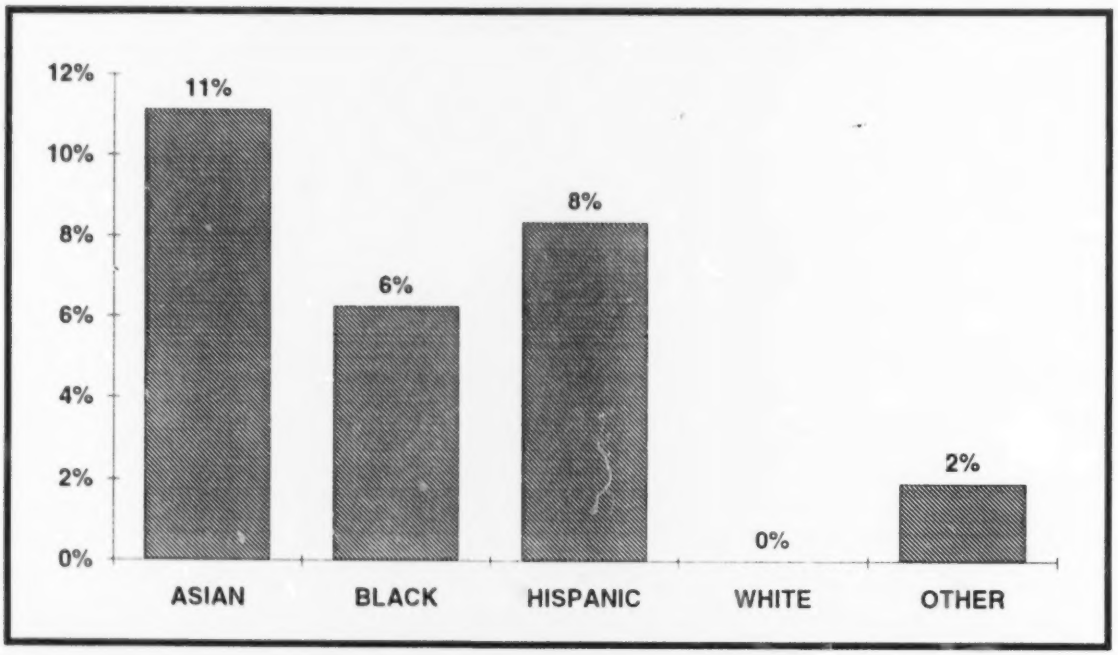
ANSWER: Proportionately largest student group(s): HISPANIC at 37%

Proportionately smallest student group(s): WHITE at 4%

Question: **What number and percentage of new college students, by ethnicity, who started in ARITHMETIC at EVC in FALL 1988 persisted through TRANSFER LEVEL MATH within four academic years?**

PERSISTENCE OF NEW COLLEGE STUDENTS THROUGH TRANSFER LEVEL MATH
NUMBER AND PERCENT BY ETHNICITY
FALL 1988 - SPRING 1992

	Fall 1988 Cohort	S92 # Pers	S92 % Pers
ASIAN	45	5	11%
BLACK	16	1	6%
HISPANIC	72	6	8%
WHITE	8	0	0%
OTHER	52	1	2%
TOTAL	193	13	7%



Low numbers necessitate caution in interpreting data.

Answer:

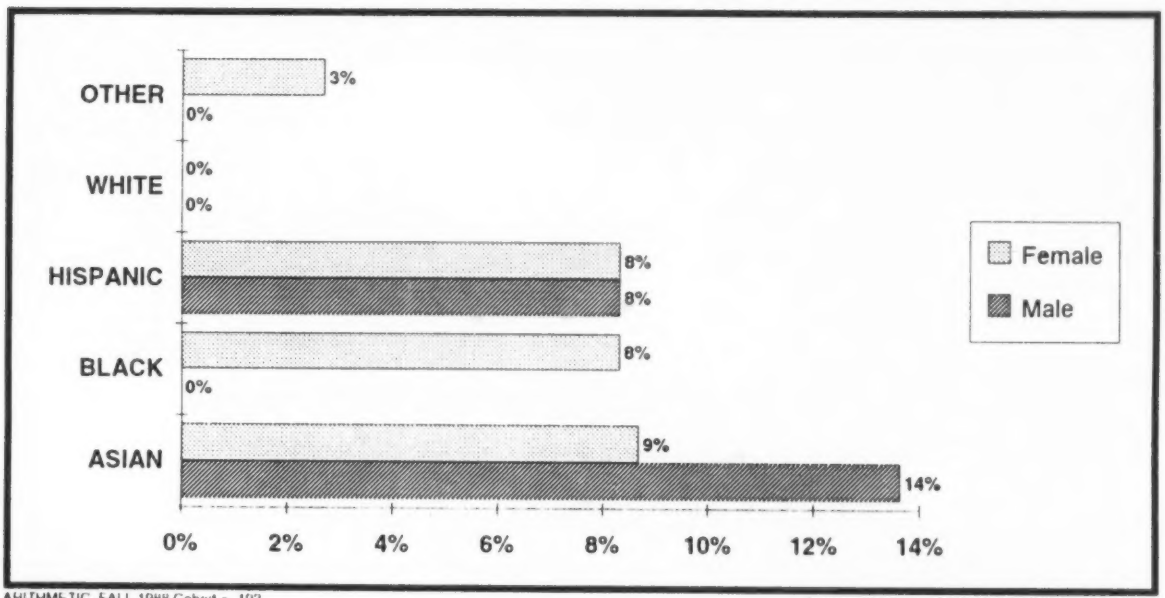
Group(s) with HIGHEST persistence rate: ASIAN at 11%

Group(s) with LOWEST persistence rate: WHITE at 0%

Question: **What number and percentage of new college students, by ethnicity and gender, who started in ARITHMETIC at EVC in FALL 1988 persisted through TRANSFER LEVEL MATH within four academic years?**

PERSISTENCE OF NEW COLLEGE STUDENTS FROM ARITHMETIC THROUGH TRANSFER LEVEL MATH
NUMBER AND PERCENT BY ETHNICITY AND GENDER
FALL 1988 - SPRING 1992

	Fall 1988 Cohort Male	S92 # Pers Male	S92 % Pers Male	Fall 1988 Cohort Female	S92 # Pers Female	S92 % Pers Female
ASIAN	22	3	14%	23	2	9%
BLACK	4	0	0%	12	1	8%
HISPANIC	24	2	8%	48	4	8%
WHITE	6	0	0%	2	0	0%
OTHER	15	0	0%	37	1	3%
TOTAL	71	5	7%	122	8	7%



ARITHMETIC, FALL 1988 Cohort = 193

Low numbers necessitate caution in interpreting data.

Answer:

HIGHEST RANKING GROUPS:

MALE

ASIAN at 14%

FEMALE

ASIAN at 9%

LOWEST RANKING GROUPS:

MALE

BLACK at 0%
WHITE at 0%
OTHER at 0%

FEMALE

WHITE at 0%

San Jose/Evergreen Community College District Longitudinal Tracking System

EVERGREEN VALLEY COLLEGE

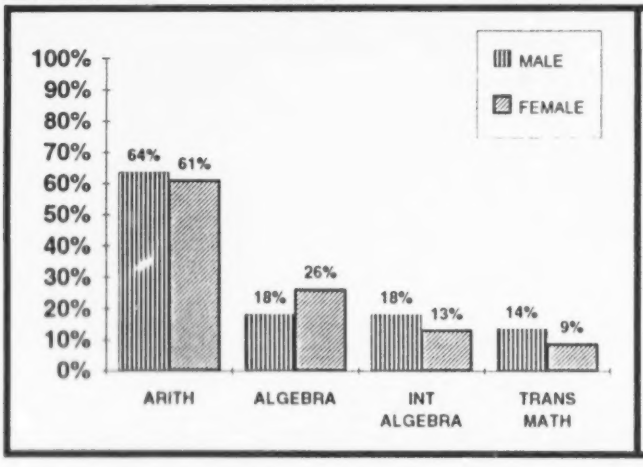
PERSISTENCE OF NEW COLLEGE STUDENTS

Students with no previous college experience who STARTED IN ARITHMETIC FALL 1988

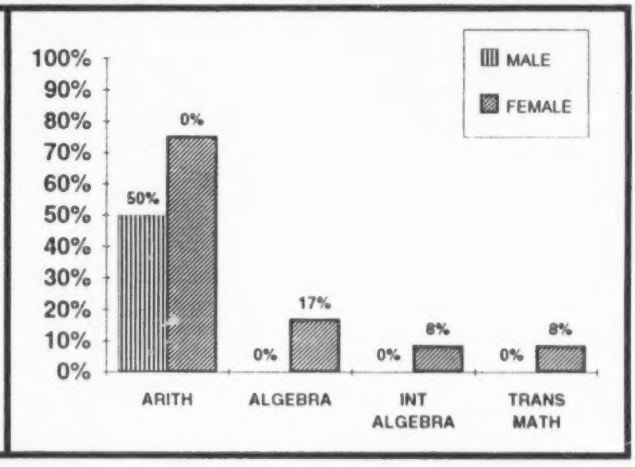
CUMULATIVE 4TH SEMESTER DATA (Spring 1992)

BY BENCHMARK ETHNICTY AND GENDER

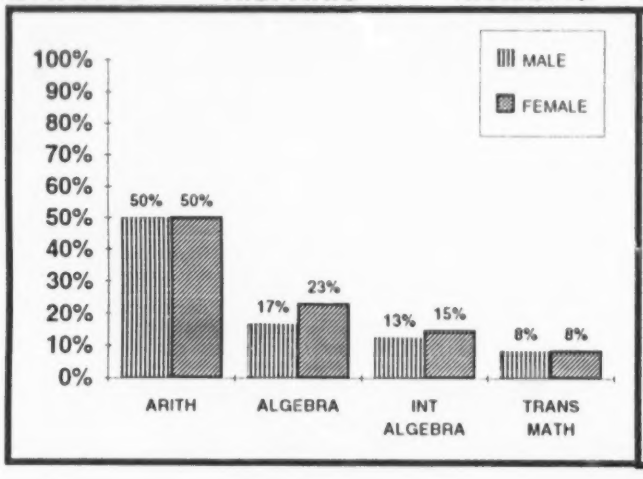
F88 F COHORT = 23 **ASIAN** F88 M COHORT = 22



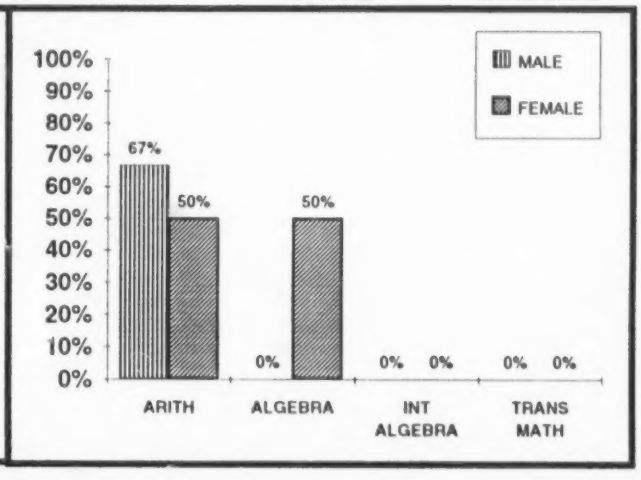
F88 F COHORT = 12 **BLACK** F88 M COHORT = 4



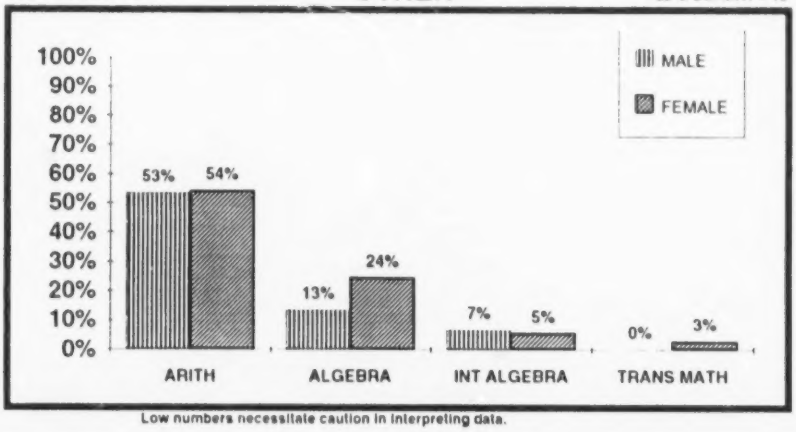
F88 F COHORT = 48 **HISPANIC** F88 M COHORT = 24



F88 F COHORT = 2 **WHITE** F88 M COHORT = 6



F88 F COHORT = 37 **OTHER** F88 M COHORT = 15



Low numbers necessitate caution in interpreting data.

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EVERGREEN VALLEY COLLEGE

PERSISTENCE OF NEW COLLEGE STUDENTS

Students with no previous college experience who STARTED IN ARITHMETIC FALL 1988

from
ARITHMETIC
through
TRANSFER LEVEL MATH

SORTED FROM HIGH TO LOW

CUMULATIVE NUMBER AND PERCENT*, 4TH SEMESTER DATA

BY ETHNICITY AND GENDER

ARITHMETIC, FALL 1988 Cohort = 193

Low numbers necessitate caution in interpreting data.

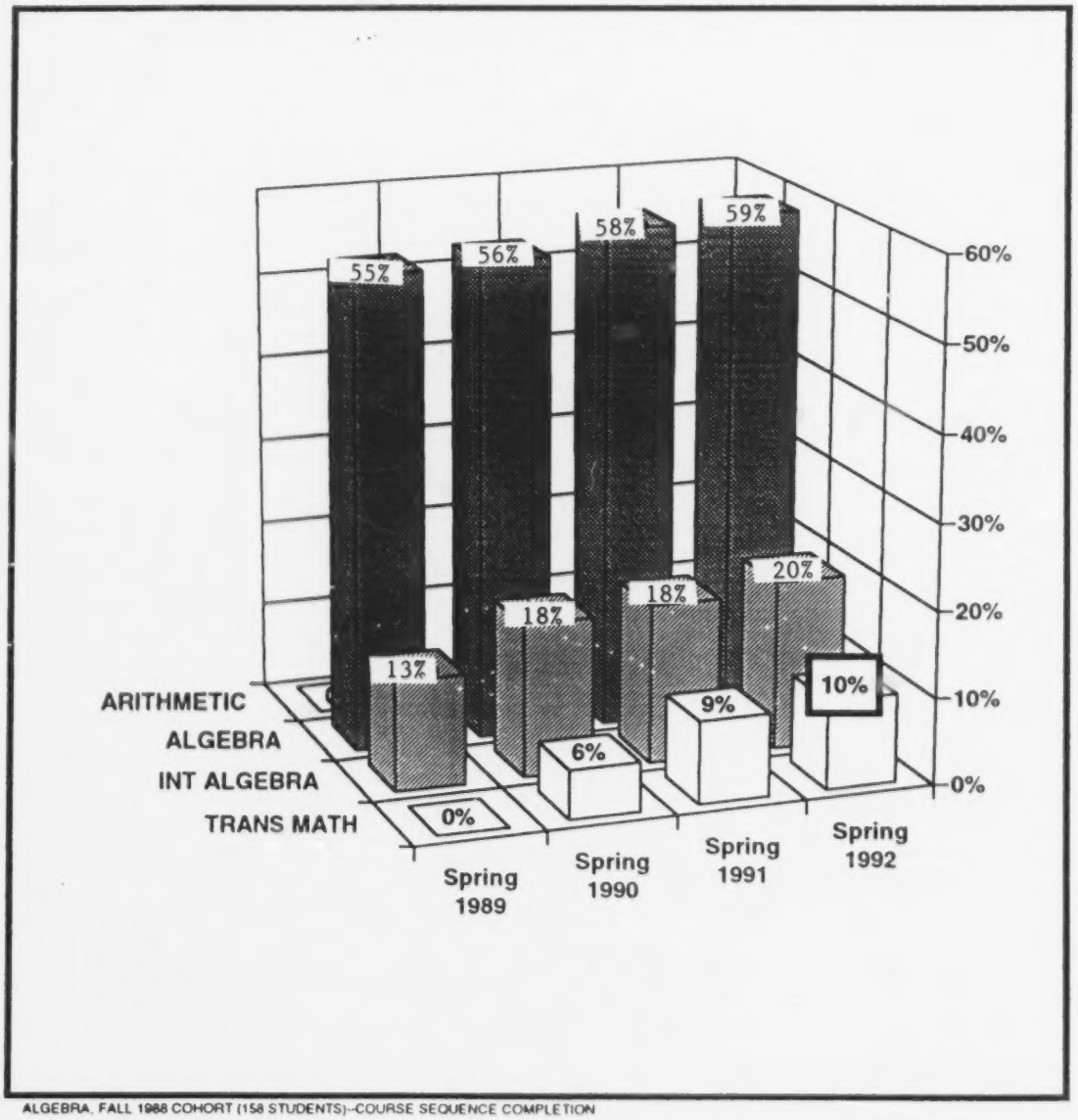
FALL 1988 - SPRING 1992					SORTED HIGH TO LOW			
ETHNIC GROUP	FALL 1988 COHORT	S92 #	S92 %		ETHNIC GROUP	FALL 1988 COHORT	S92 #	S92 %
IND M	4	0	0%		ASN M	9	3	33%
IND F	3	0	0%		ASN F	13	2	15%
FIL M	10	0	0%		HSP F	48	4	8%
FIL F	6	0	0%		HSP M	24	2	8%
BLK M	4	0	0%		BLK F	12	1	8%
BLK F	12	1	8%		OTH F	34	1	3%
MID M	0	0	0%		OTH M	11	0	0%
MID F	0	0	0%		FIL M	10	0	0%
PAC M	3	0	0%		UNK F	10	0	0%
PAC F	4	0	0%		UNK M	8	0	0%
ASN M	9	3	33%		FIL F	6	0	0%
ASN F	13	2	15%		WHT M	6	0	0%
HSP M	24	2	8%		IND M	4	0	0%
HSP F	48	4	8%		BLK M	4	0	0%
WHT M	6	0	0%		PAC F	4	0	0%
WHT F	2	0	0%		IND F	3	0	0%
OTH M	11	0	0%		PAC M	3	0	0%
OTH F	34	1	3%		WHT F	2	0	0%
DCL M	0	0	0%		DCL F	1	0	0%
DCL F	1	0	0%		MID M	0	0	0%
UNK M	8	0	0%		MID F	0	0	0%
UNK F	10	0	0%		DCL M	0	0	0%

*Percentages in this table differ from other tables in this report because this table includes Unknown and Decline to State categories.

EVERGREEN VALLEY COLLEGE

PERSISTENCE OF NEW COLLEGE STUDENTS
from
ALGEBRA
through
TRANSFER LEVEL MATH

FALL 1988 - SPRING 1992



ALGEBRA, FALL 1988 COHORT (158 STUDENTS)--COURSE SEQUENCE COMPLETION

Background Information

Abbreviations

Ethnic Groups

IND = American Indian/Alaskan native
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ASN = Asian (Chinese, Japanese, Korean, Vietnamese, etc.)
HSP = Chicano, Latino, Mexican, Hispanic
WHT = White, non-Hispanic
OTH = Other non-White
DCL = Decline to state
UNK = Unknown

Benchmark Ethnic Groups

ASN = ASN + FIL + PAC
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Note: DCL & UNK are not represented in the benchmark figures.

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COMPETENCY = A, B, C, or CR grade in course or equivalent course
PERSISTENCE (PERS) = Successfully continuing to the next level after gaining competency in the previous level

Appendices

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Project Author

Dr. Jon Kangas

Data Collection

Jennifer Drino
Tony Ma

Prototype & Template Creation, Document Preparation

Katheen Budros, Program Assistant

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DATA HIGHLIGHTS

- Only 16 students, or 10%, of the 158 new students beginning in Algebra (Math 12) in Fall 1988 at EVC progressed through Transfer Level Math between Fall 1988 and Spring 1992.

- 59% of these 158 students beginning in Math 12 achieved competency in Math 12 (Math Level 2) within four academic years, most of them (81 of 93) during the initial semester; 20% achieved competency in Intermediate Algebra (Math Level 3) within the four-year time span.

- Hispanics had the highest rate of achievement through Transfer level Math at 12%. No other group exceeded 10%.

- White Males had the highest persistence rate by ethnicity and gender, at 17%, but this was based on only one student of 6. The overall rate in all categories was extremely low.

- No Black students and no White Female students who started in Math 12 completed Transfer Level Math within four academic years. Low numbers in some of the ethnic categories make it difficult to draw meaningful comparisons between groups, but is worth examining the reasons that 90% of the total group of 158 failed to persist through Transfer Level Math.

- 93% of the original group of 158 was non-White.

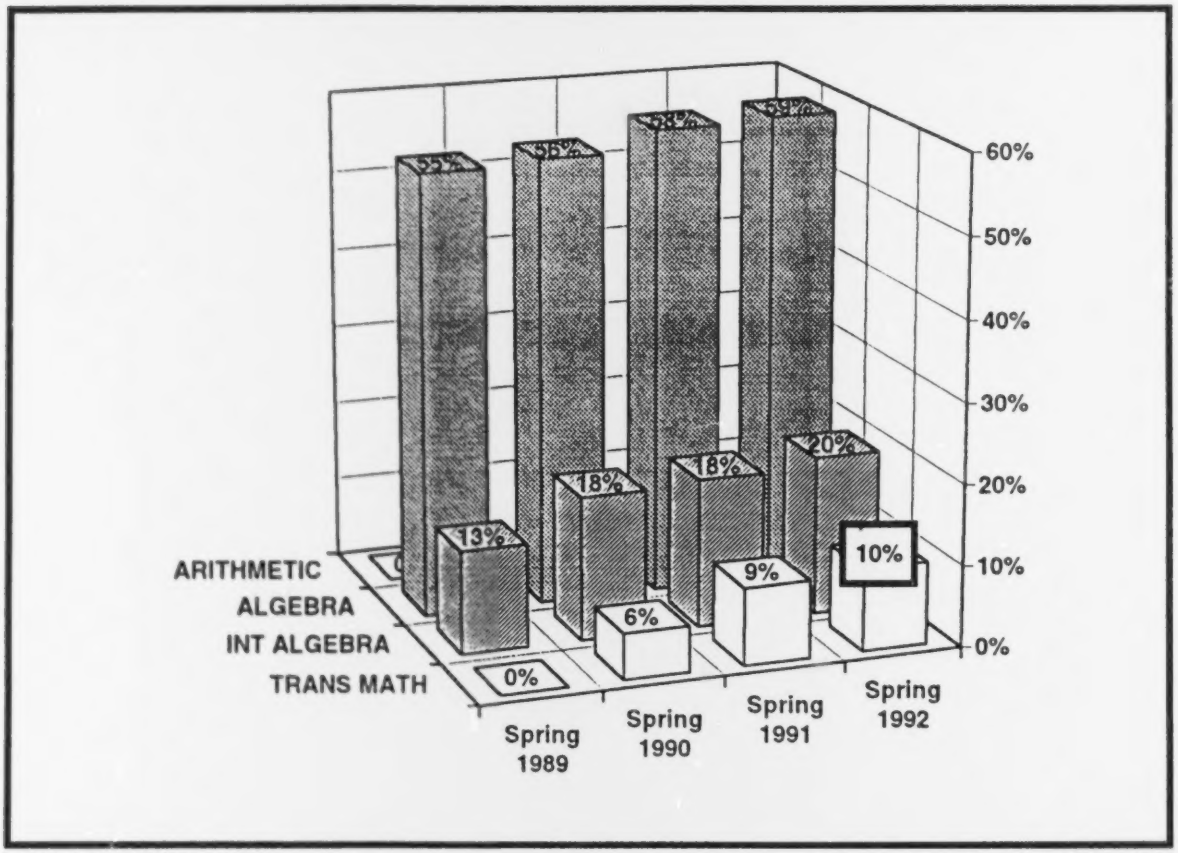
- Of the 158 students beginning in Algebra, Hispanic (32%) was the largest group, followed by Asian (30%) and Other (28%). Black, at 4%, comprised the smallest.

COMMENT: 93% of the Math 12 students were non-White. If one of the college's goals is to transfer more underprepared students and protected ethnic groups, this goal is not being met for the large percentage of students entering at the Math 12 (Algebra) level.

Question: **What percentage of new college students who started in ALGEBRA at EVC in FALL 1988 persisted through TRANSFER LEVEL MATH within four academic years?**

Cumulative Persistence from ALGEBRA through TRANSFER LEVEL MATH

		ARITHMETIC	ALGEBRA	INT ALGEBRA	TRANS MATH	
	Spring 1989	0%	55%	13%	0%	
	Spring 1990	0%	56%	18%	6%	
	Spring 1991	0%	58%	18%	9%	
	Spring 1992	0%	59%	20%	10%	



ALGEBRA, FALL 1988 Cohort = 158

Low numbers necessitate caution in interpreting data.

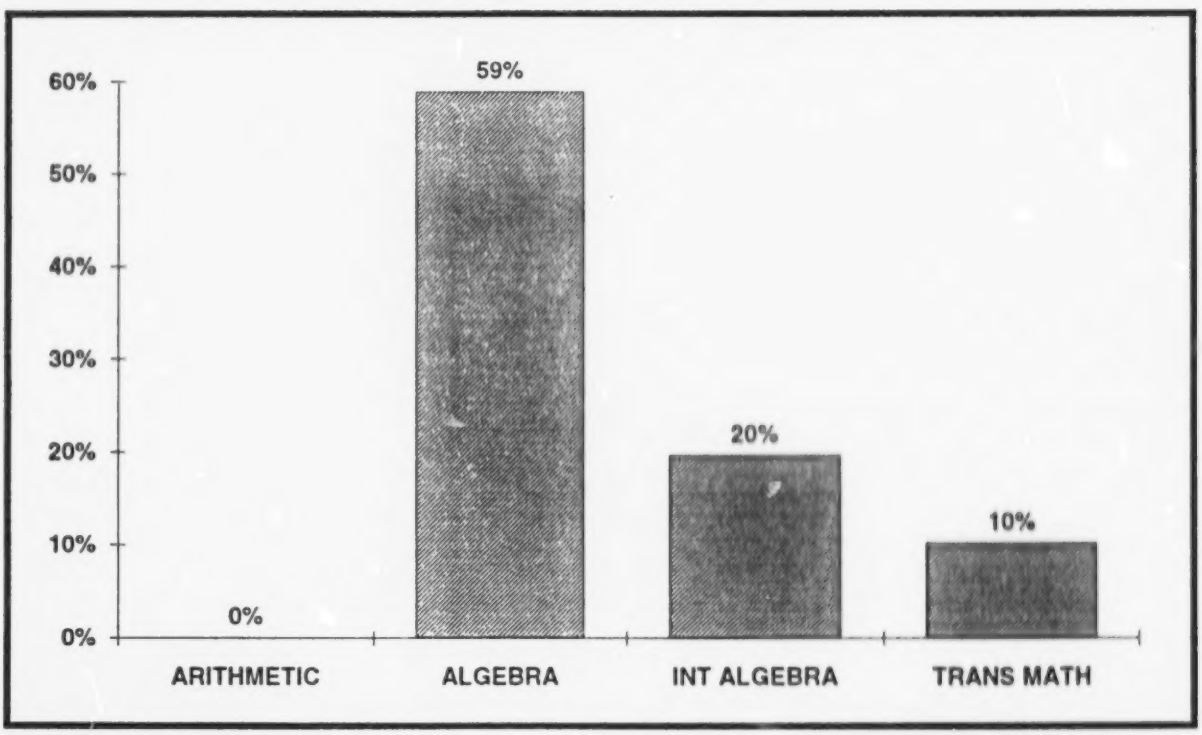
Answer: **10%** of the original FALL 1988 group persisted through Math 21 & 22, Math 25, etc. within four academic years.

Question: **What are the cumulative ALGEBRA and higher level MATHEMATICS competency rates over four academic years of new college students who started in ALGEBRA at EVC in FALL 1988?**

Cumulative Percentage by Semester

	FALL 1988	F88	S89	Su89	F89	S90	Su90	F90	S91	Su91	F91	S92
	Cohort	%	%	%	%	%	%	%	%	%	%	%
ARITHMETIC		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
ALGEBRA	158	51%	55%	55%	56%	56%	56%	56%	58%	58%	58%	59%
INT ALGEBRA		0%	13%	13%	15%	18%	18%	18%	18%	18%	19%	20%
TRANS MATH		0%	0%	0%	5%	6%	6%	8%	9%	9%	9%	10%

CUMULATIVE COMPETENCY RATES FOR ALGEBRA AND HIGHER MATH AFTER FOUR ACADEMIC YEARS (Spring 1992)



ALGEBRA, FALL 1988 Cohort = 158

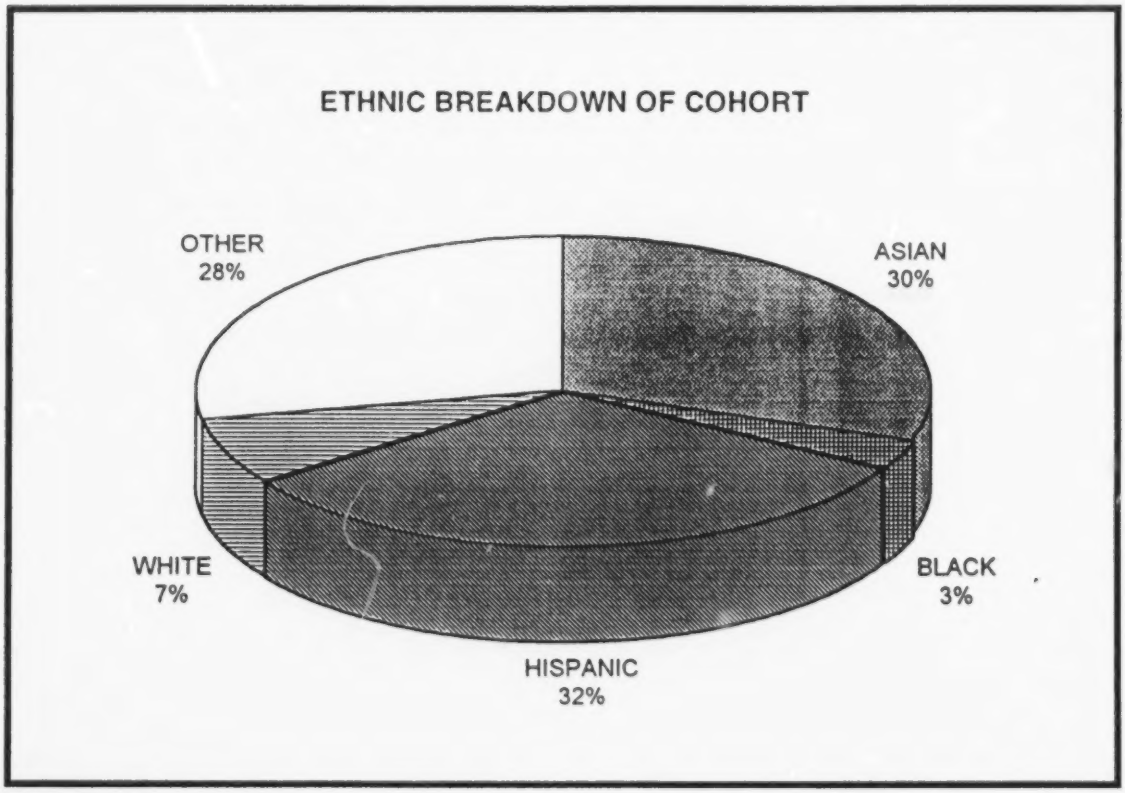
Low numbers necessitate caution in interpreting data.

Answer: After four academic years, the cumulative competency rates for new college students who began in FALL 1988 in ALGEBRA were as follows:

ARITHMETIC	0%
ALGEBRA	59%
INT ALGEBRA	20%
TRANSFER LEVEL MATH	10%

QUESTION: **What was the benchmark ethnic breakdown of new college students who started in ALGEBRA at EVC in FALL 1988?**

FALL 1988 COHORT		
GROUP	#	%
ASIAN	48	30%
BLACK	5	3%
HISPANIC	50	32%
WHITE	11	7%
OTHER	44	28%
TOTAL	158	100%



ANSWER:

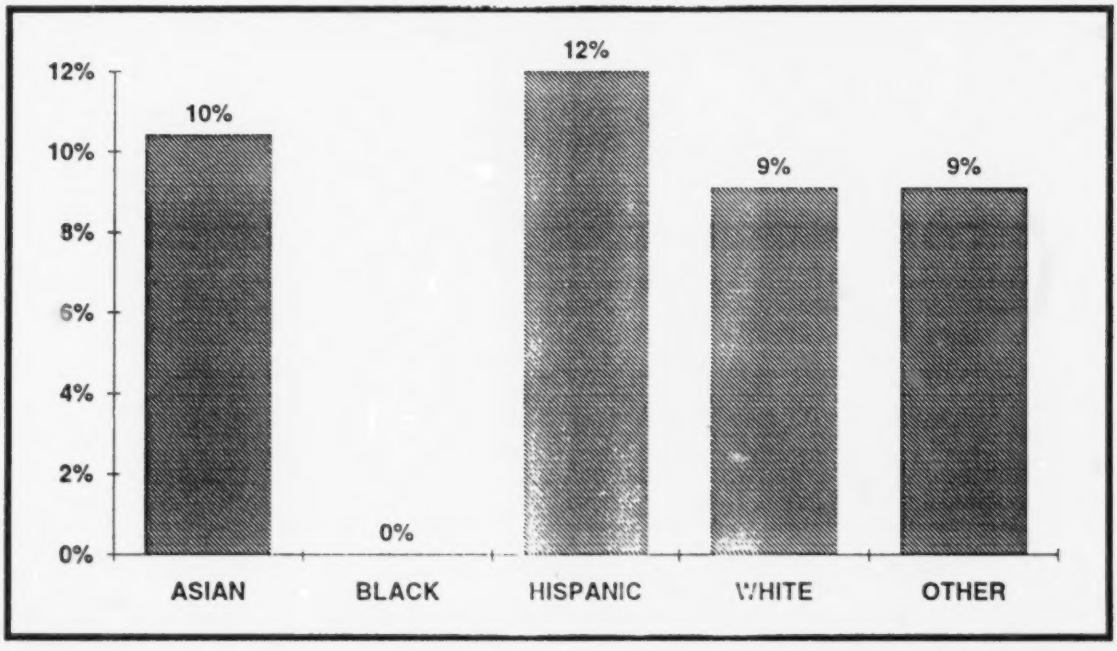
Proportionately largest student group(s): HISPANIC at 32%

Proportionately smallest student group(s): BLACK at 3%

Question: **What number and percentage of new college students, by ethnicity, who started in ALGEBRA at EVC in FALL 1988 persisted through TRANSFER LEVEL MATH within four academic years?**

PERSISTENCE OF NEW COLLEGE STUDENTS THROUGH
TRANSFER LEVEL MATH
NUMBER AND PERCENT BY ETHNICITY
FALL 1988 - SPRING 1992

	Fall 1988 Cohort	S92 # Pers	S92 % Pers
ASIAN	48	5	10%
BLACK	5	0	0%
HISPANIC	50	6	12%
WHITE	11	1	9%
OTHER	44	4	9%
TOTAL	158	16	10%



Low numbers necessitate caution in interpreting data.

Answer:

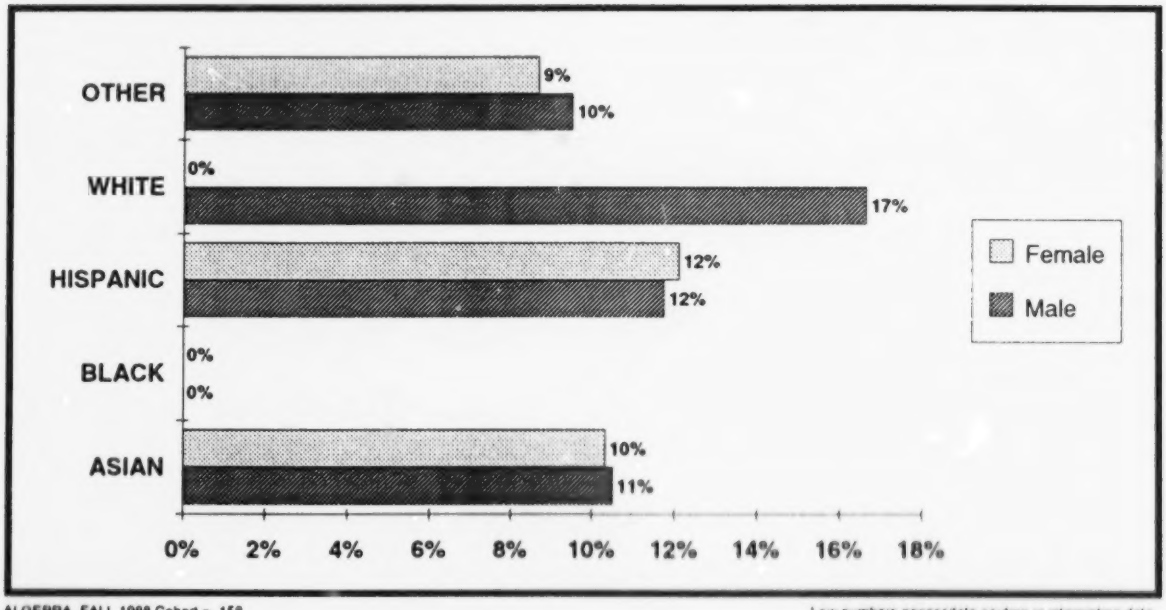
Group(s) with HIGHEST persistence rate: HISPANIC at 12%

Group(s) with LOWEST persistence rate: BLACK at 0%

Question: **What number and percentage of new college students, by ethnicity and gender, who started in ALGEBRA at EVC in FALL 1988 persisted through TRANSFER LEVEL MATH within four academic years?**

PERSISTENCE OF NEW COLLEGE STUDENTS FROM ALGEBRA THROUGH TRANSFER LEVEL MATH
NUMBER AND PERCENT BY ETHNICITY AND GENDER
FALL 1988 - SPRING 1992

	Fall 1988 Cohort	S92 # Pers	S92 % Pers	Fall 1988 Cohort	S92 # Pers	S92 % Pers
	Male	Male	Male	Female	Female	Female
ASIAN	19	2	11%	29	3	10%
BLACK	3	0	0%	2	0	0%
HISPANIC	17	2	12%	33	4	12%
WHITE	6	1	17%	5	0	0%
OTHER	21	2	10%	23	2	9%
TOTAL	66	7	11%	92	9	10%



ALGEBRA, FALL 1988 Cohort = 158

Low numbers necessitate caution in interpreting data

Answer:

HIGHEST RANKING GROUPS:

MALE

WHITE at 17%

FEMALE

HISPANIC at 12%

LOWEST RANKING GROUPS:

MALE

BLACK at 0%

FEMALE

BLACK at 0%
WHITE at 0%

San Jose/Evergreen Community College District Longitudinal Tracking System

EVERGREEN VALLEY COLLEGE

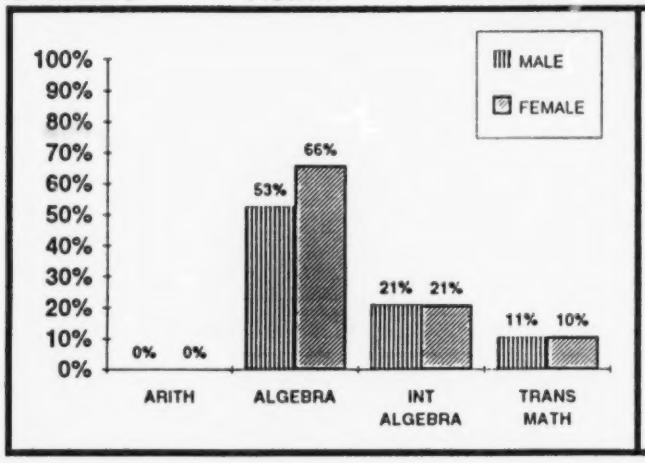
PERSISTENCE OF NEW COLLEGE STUDENTS

Students with no previous college experience who STARTED IN ALGEBRA FALL 1988

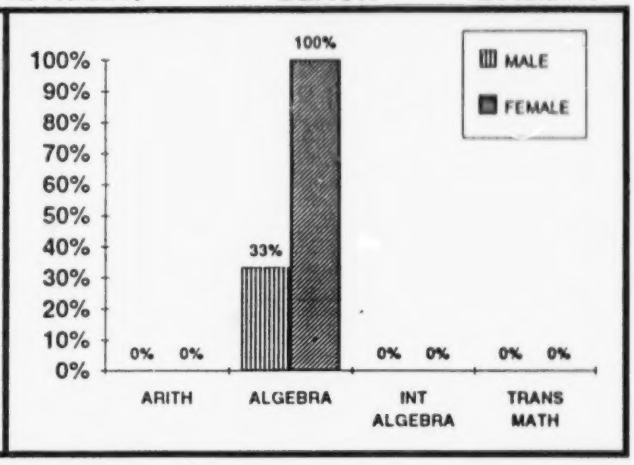
CUMULATIVE 4TH SEMESTER DATA (Spring 1992)

BY BENCHMARK ETHNICTY AND GENDER

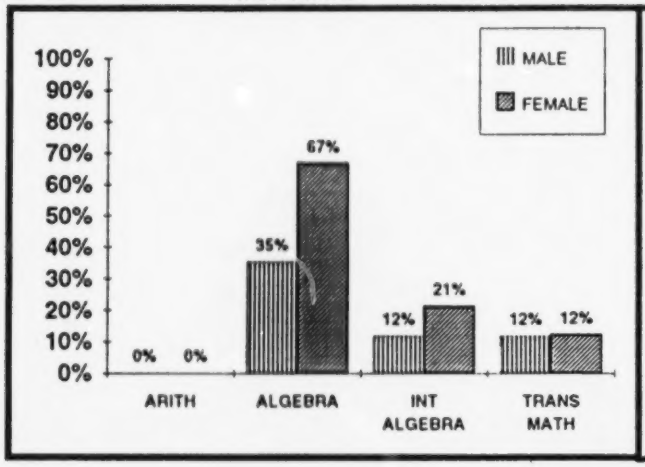
F88 F COHORT = 29 — **ASIAN** — F88 M COHORT = 19



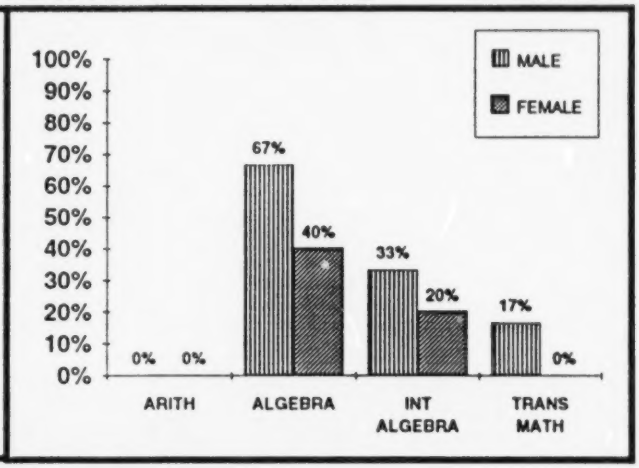
F88 F COHORT = 2 — **BLACK** — F88 M COHORT = 3



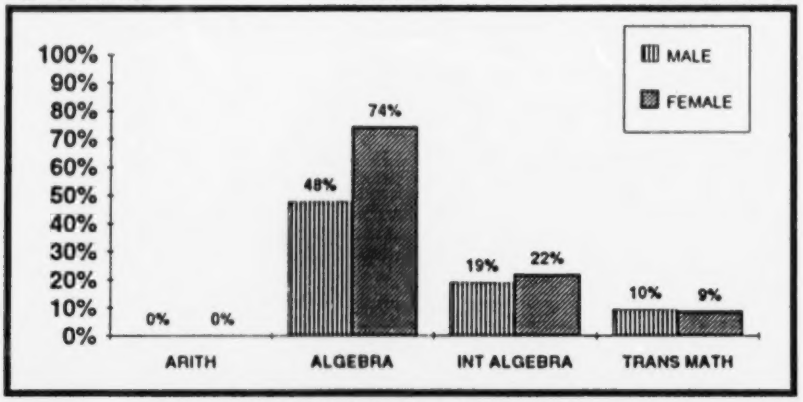
F88 F COHORT = 33 — **HISPANIC** — F88 M COHORT = 17



F88 F COHORT = 5 — **WHITE** — F88 M COHORT = 6



F88 F COHORT = 23 — **OTHER** — F88 M COHORT = 21



Low numbers necessitate caution in interpreting data.

EVERGREEN VALLEY COLLEGE

PERSISTENCE OF NEW COLLEGE STUDENTS

Students with no previous college experience who STARTED IN ALGEBRA FALL 1988

from
ALGEBRA
through
TRANSFER LEVEL MATH

SORTED FROM HIGH TO LOW

CUMULATIVE NUMBER AND PERCENT*, 4TH SEMESTER DATA

BY ETHNICITY AND GENDER

ALGEBRA, FALL 1988 Cohort = 158

Low numbers neccessitate caution in interpreting data.

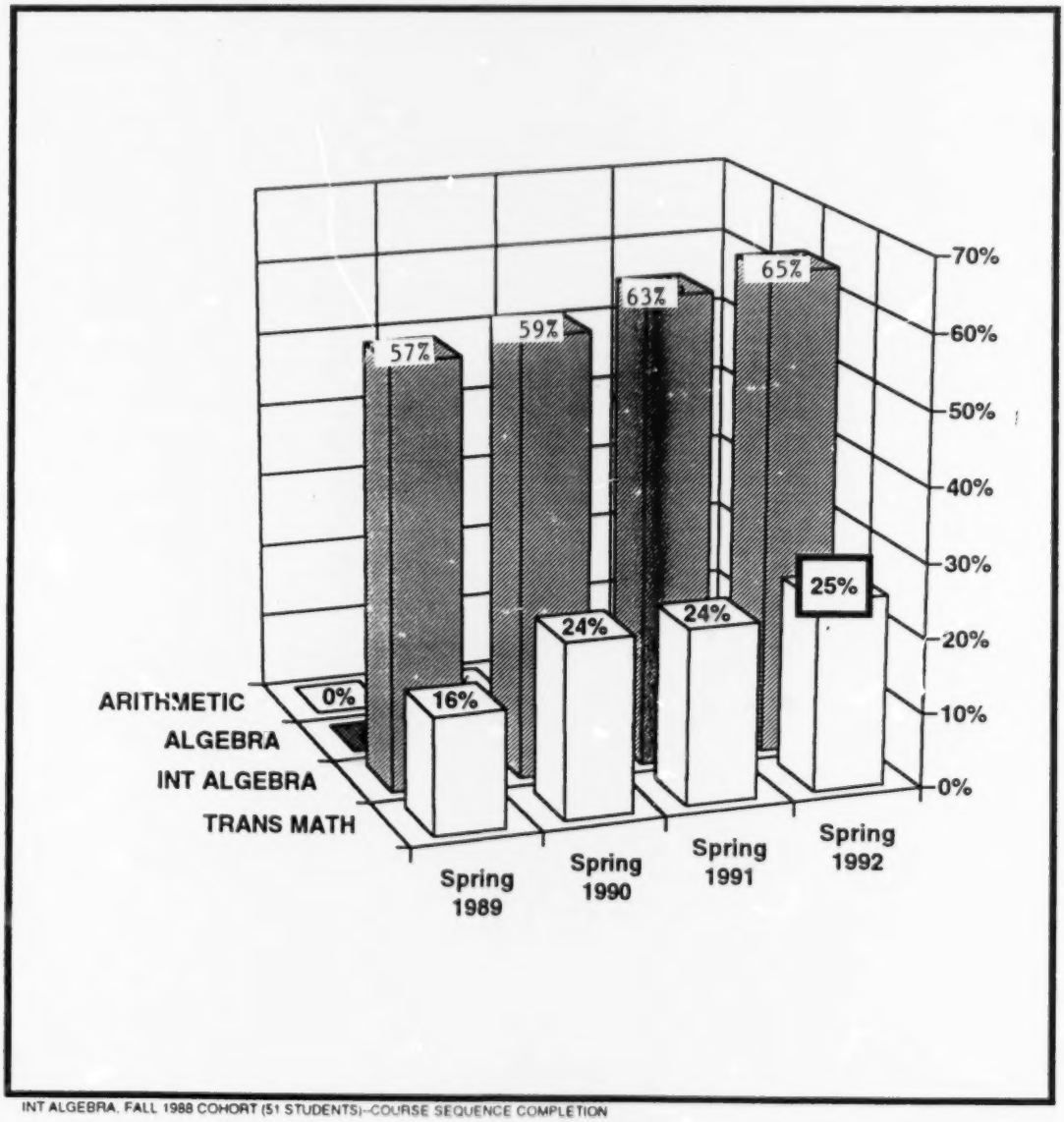
FALL 1988 - SPRING 1992					SORTED HIGH TO LOW			
ETHNIC GROUP	FALL 1988 COHORT	S92 #	S92 %		ETHNIC GROUP	FALL 1988 COHORT	S92 #	S92 %
IND M	2	0	0%		FIL F	9	2	22%
IND F	4	0	0%		WHT M	6	1	17%
FIL M	5	0	0%		ASN M	13	2	15%
FIL F	9	2	22%		UNK M	7	1	14%
BLK M	3	0	0%		HSP F	33	4	12%
BLK F	2	0	0%		HSP M	17	2	12%
MID M	0	0	0%		OTH M	19	2	11%
MID F	0	0	0%		OTH F	19	2	11%
PAC M	1	0	0%		ASN F	14	1	7%
PAC F	6	0	0%		UNK F	9	0	0%
ASN M	13	2	15%		PAC F	6	0	0%
ASN F	14	1	7%		FIL M	5	0	0%
HSP M	17	2	12%		WHT F	5	0	0%
HSP F	33	4	12%		IND F	4	0	0%
WHT M	6	1	17%		BLK M	3	0	0%
WHT F	5	0	0%		IND M	2	0	0%
OTH M	19	2	11%		BLK F	2	0	0%
OTH F	19	2	11%		PAC M	1	0	0%
DCL M	1	0	0%		DCL M	1	0	0%
DCL F	0	0	0%		MID M	0	0	0%
UNK M	7	1	14%		MID F	0	0	0%
UNK F	9	0	0%		DCL F	0	0	0%

*Percentages in this table differ from other tables in this report because this table includes Unknown and Decline to State categories.

EVERGREEN VALLEY COLLEGE

PERSISTENCE OF NEW COLLEGE STUDENTS
from
INT ALGEBRA
through
TRANSFER LEVEL MATH

FALL 1988 - SPRING 1992



INT ALGEBRA, FALL 1988 COHORT (51 STUDENTS)--COURSE SEQUENCE COMPLETION

Research Report #296

Background Information

Abbreviations

Ethnic Groups

IND = American Indian/Alaskan native
FIL = Filipino
BLK = Black
MID = Middle Eastern
PAC = Pacific Islander (Guam, Samoa, etc.)
ASN = Asian (Chinese, Japanese, Korean, Vietnamese, etc.)
HSP = Chicano, Latino, Mexican, Hispanic
WHT = White, non-Hispanic
OTH = Other non-White
DCL = Decline to state
UNK = Unknown

Benchmark Ethnic Groups

ASN = ASN + FIL + PAC
BLK = BLK
HSP = HSP
WHT = WHT
OTH = OTH + IND + MID

Note: DCL & UNK are not represented in the benchmark figures.

Other Abbreviations & Definitions

SJCC = San Jose City College
EVC = Evergreen Valley College
ARITHMETIC = Mathematics Level 1: Achieved by successfully completing three units of MATH 310 (Arithmetic) or equivalent course or appropriate test score
ALG = Mathematics Level 2: Achieved by successfully completing one of the following MATH classes: 11A, 11R or 12 (Algebra)
INT ALG = Mathematics Level 3: Achieved by successfully completing MATH 13 (Intermediate Algebra)
TRANS MATH = Transfer Level Math: Achieved by successfully completing one of the following MATH classes, designated as "B4" in the District Master Course Schedule (accepted for transfer by CSU): Math 21, 22, 25, 51, 52, 55, 60, 61, 62, 63, 70, 71, 72, 73, 78, 79, 81, 82
COMPETENCY = A, B, C, or CR grade in course or equivalent course
PERSISTENCE (PERS) = Successfully continuing to the next level after gaining competency in the previous level

Appendices

Detailed appendices are available upon request from the office of Academic Standards.

Funding

The prototype and template for this report were developed using Title III funds.

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Data Collection

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Prototype & Template Creation, Document Preparation

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DATA HIGHLIGHTS

- **Thirteen students (25%) of the 51 new students beginning in Intermediate Algebra (Math 13) in Fall 1988 progressed through Transfer Level Math between Fall 1988 and Spring 1992.**

- **33, or 65%, of these 51 students beginning in Math 13 achieved competency in Math 13 (Math Level 3) within four academic years. 82% of those succeeding in Math 13 (27 of 33 students) did so during the initial semester.**

- **Asians made up 55% of the original group. 71% of this ethnic group succeeded in Math 13; 36% persisted through Transfer Level Math within four years.**

- **Asian males achieved Transfer Level Math at the highest rate of 40% (8 of 20). In all other ethnic/gender categories, the numbers were less than 10, making it difficult to draw conclusions or make comparisons.**

- **92% of the original group of 51 was non-White.**

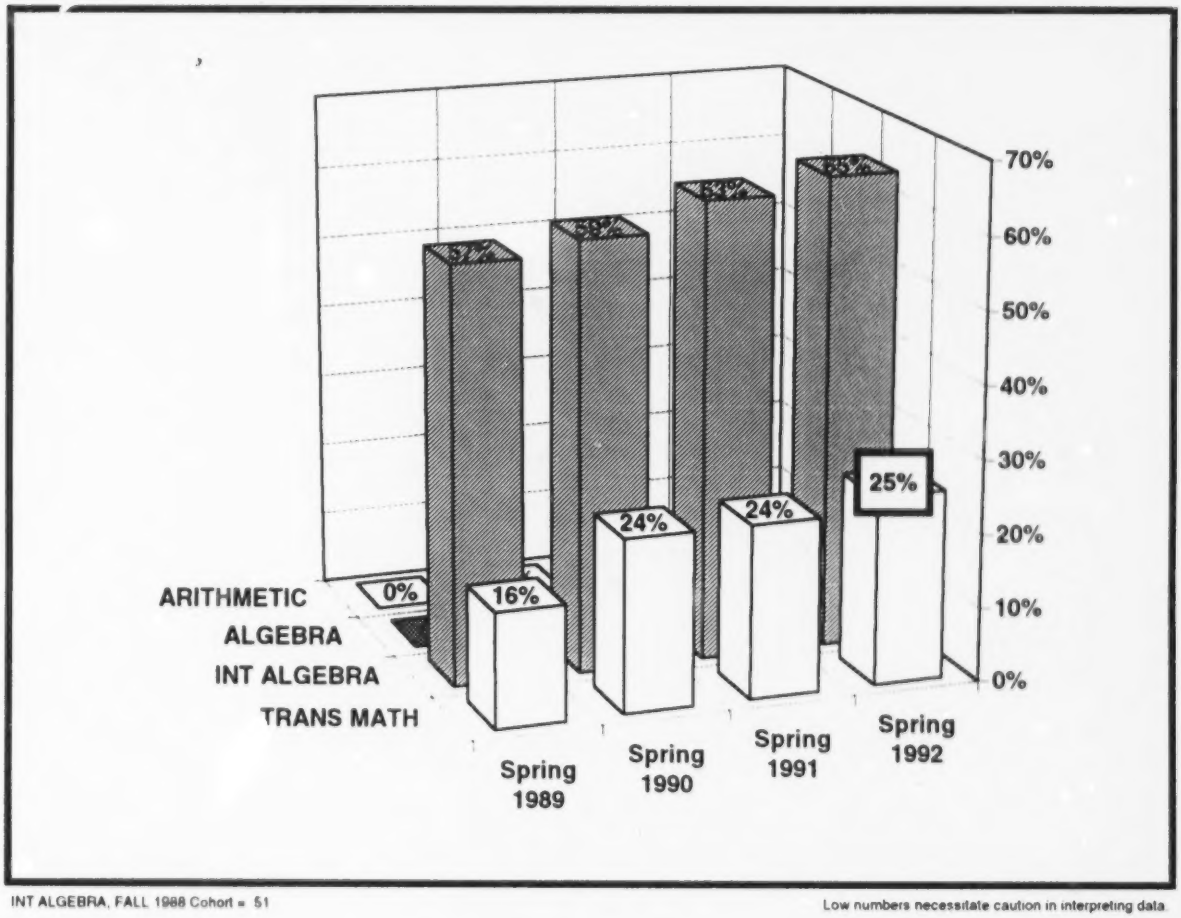
- **Whites (8%) and Blacks (2%) represented the smallest groups.**

COMMENT: 92% of the Math 13 students were non-White. If one of the college's goals is to transfer more underprepared students and protected ethnic groups, this goal is not being met for the large percentage of students entering at the Intermediate Algebra level.

Question: **What percentage of new college students who started in INT ALGEBRA at EVC in FALL 1988 persisted through TRANSFER LEVEL MATH within four academic years?**

Cumulative Persistence from INT ALGEBRA through TRANSFER LEVEL MATH

		ARITHMETIC	ALGEBRA	INT ALGEBRA	TRANS MATH	
	Spring 1989	0%	0%	57%	16%	
	Spring 1990	0%	0%	59%	24%	
	Spring 1991	0%	0%	63%	24%	
	Spring 1992	0%	0%	65%	25%	



INT ALGEBRA, FALL 1988 Cohort = 51

Low numbers necessitate caution in interpreting data.

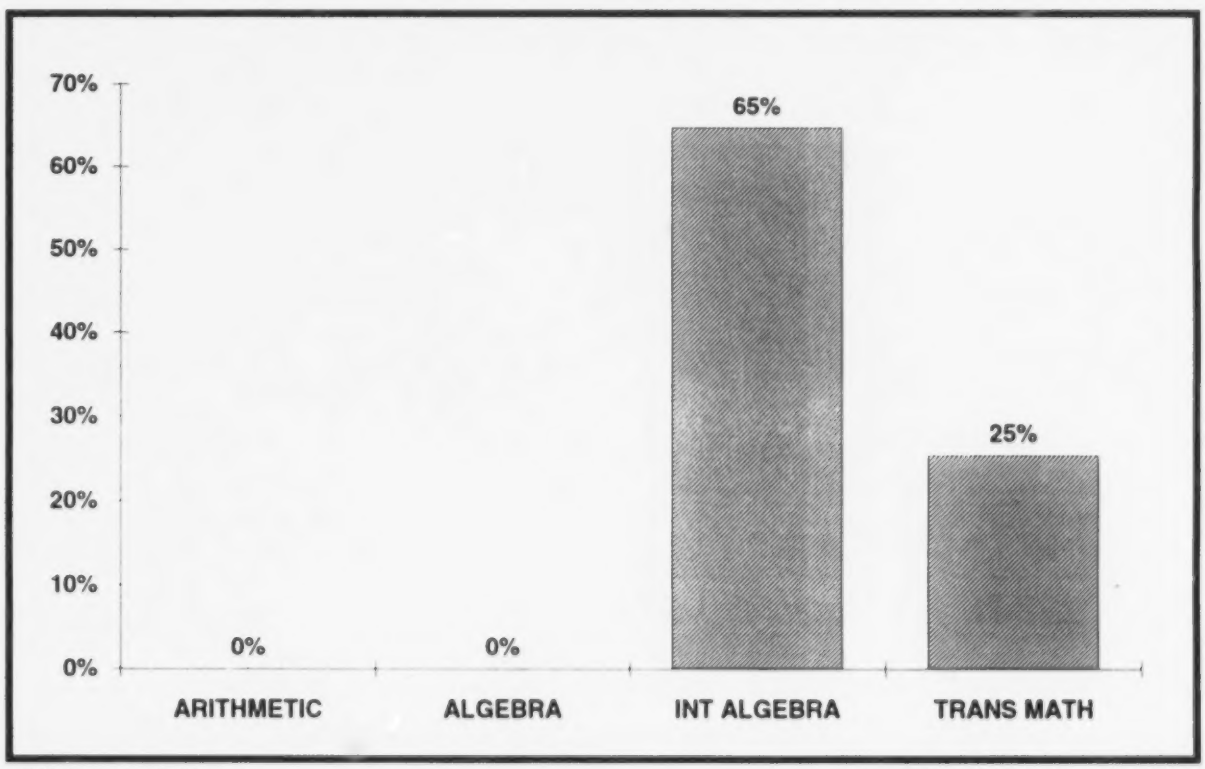
Answer: **25%** of the original FALL 1988 group persisted through TRANSFER LEVEL MATH within four academic years.

Question: **What are the cumulative INT ALGEBRA and higher level MATHEMATICS competency rates over four academic years of new college students who started in INT ALGEBRA at EVC in FALL 1988?**

Cumulative Percentage by Semester

	FALL 1988	F88	S89	Su89	F89	S90	Su90	F90	S91	Su91	F91	S92
	Cohort	%	%	%	%	%	%	%	%	%	%	%
ARITHMETIC		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
ALGEBRA		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
INT ALGEBRA	51	53%	57%	57%	57%	59%	59%	61%	63%	63%	65%	65%
TRANS MATH		0%	16%	18%	24%	24%	24%	24%	24%	24%	24%	25%

CUMULATIVE COMPETENCY RATES FOR INT ALGEBRA AND HIGHER MATH AFTER FOUR ACADEMIC YEARS (Spring 1992)



INT ALGEBRA, FALL 1988 Cohort = 51

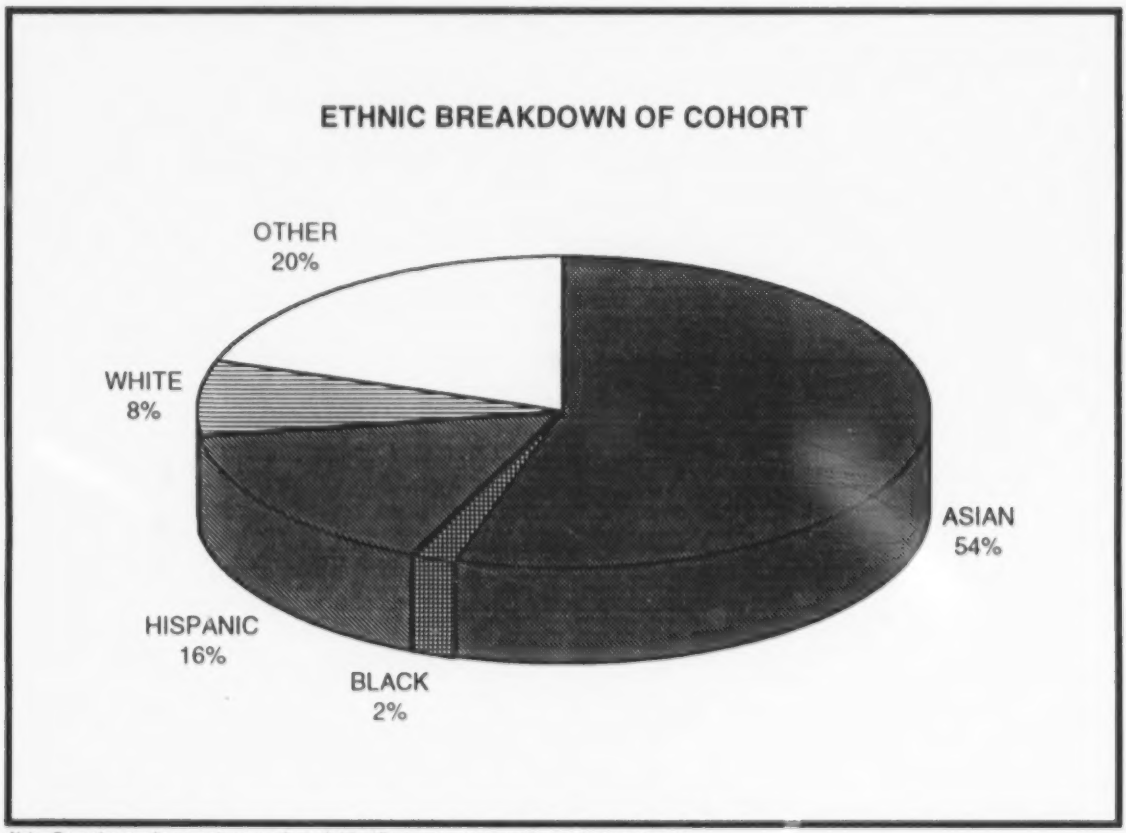
Low numbers necessitate caution in interpreting data.

Answer: After four academic years, the cumulative competency rates for new college students who began in FALL 1988 in INT ALGEBRA were as follows:

ARITHMETIC	0%
ALGEBRA	0%
INT ALGEBRA	65%
TRANSFER LEVEL MATH	25%

QUESTION: **What was the benchmark ethnic breakdown of new college students who started in INT ALGEBRA at EVC in FALL 1988?**

FALL 1988 COHORT		
GROUP	#	%
ASIAN	28	55%
BLACK	1	2%
HISPANIC	8	16%
WHITE	4	8%
OTHER	10	20%
TOTAL	51	100%



Note: Computer rounding sometimes results in slightly different percentages on the pie chart and the table

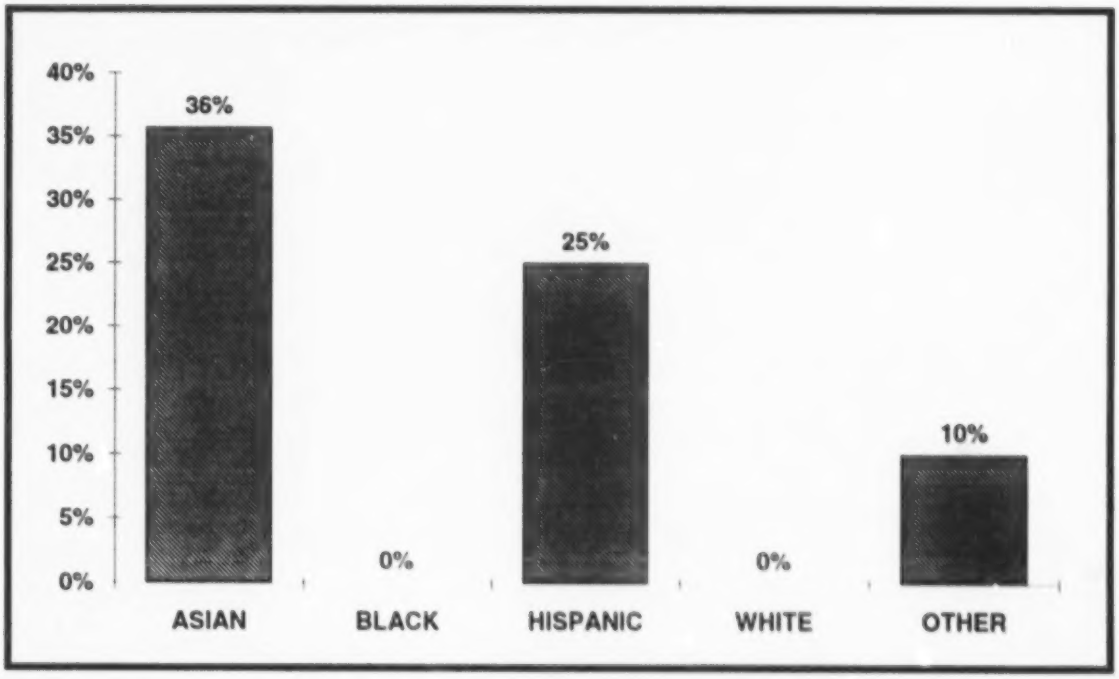
ANSWER: Proportionately largest student group(s): ASIAN at 55%

Proportionately smallest student group(s): BLACK at 2%

Question: **What number and percentage of new college students, by ethnicity, who started in INT ALGEBRA at EVC in FALL 1988 persisted through TRANSFER LEVEL MATH within four academic years?**

PERSISTENCE OF NEW COLLEGE STUDENTS THROUGH TRANSFER LEVEL MATH
NUMBER AND PERCENT BY ETHNICITY
FALL 1988 - SPRING 1992

	Fall 1988 Cohort	S92 # Pers	S92 % Pers
ASIAN	28	10	36%
BLACK	1	0	0%
HISPANIC	8	2	25%
WHITE	4	0	0%
OTHER	10	1	10%
TOTAL	51	13	25%



Low numbers necessitate caution in interpreting data

Answer:

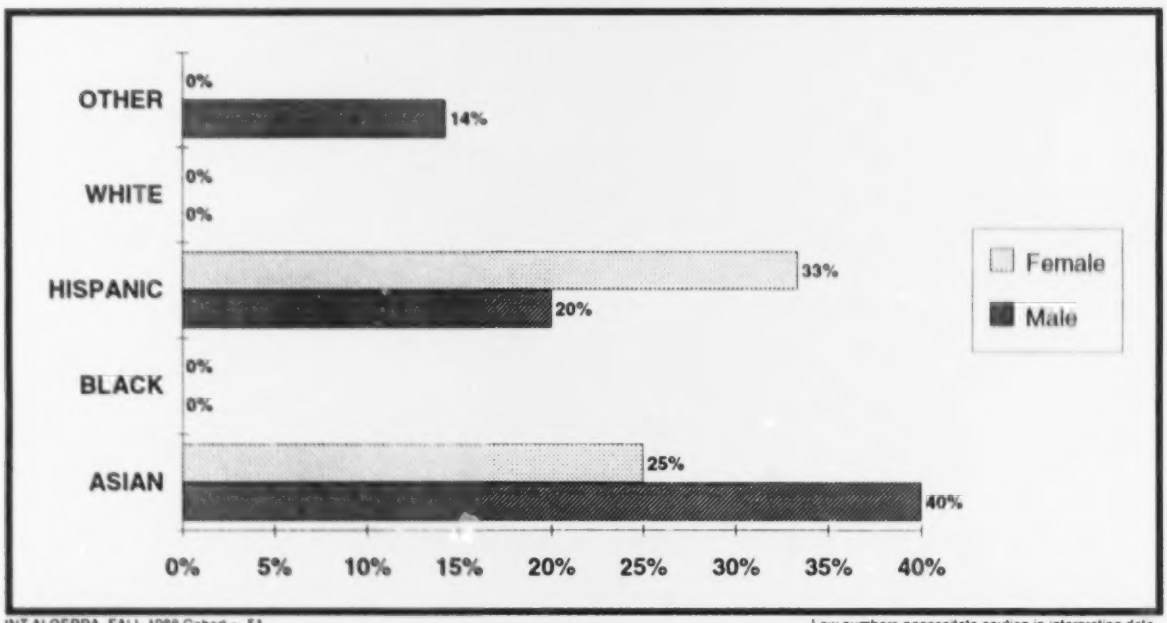
Group(s) with HIGHEST persistence rate: ASIAN at 36%

Group(s) with LOWEST persistence rate: BLACK at 0%
WHITE at 0%

Question: **What number and percentage of new college students, by ethnicity and gender, who started in INT ALGEBRA at EVC in FALL 1988 persisted through TRANSFER LEVEL MATH within four academic years?**

PERSISTENCE OF NEW COLLEGE STUDENTS FROM INT ALGEBRA THROUGH TRANSFER LEVEL MATH
NUMBER AND PERCENT BY ETHNICITY AND GENDER
FALL 1988 - SPRING 1992

	Fall 1988 Cohort	S92 # Pers	S92 % Pers	Fall 1988 Cohort	S92 # Pers	S92 % Pers
	Male	Male	Male	Female	Female	Female
ASIAN	20	8	40%	8	2	25%
BLACK	1	0	0%	0	0	0%
HISPANIC	5	1	20%	3	1	33%
WHITE	1	0	0%	3	0	0%
OTHER	7	1	14%	3	0	0%
TOTAL	34	10	29%	17	3	18%



INT ALGEBRA, FALL 1988 Cohort = 51

Low numbers necessitate caution in interpreting data.

Answer:

HIGHEST RANKING GROUPS:

MALE

ASIAN at 40%

FEMALE

HISPANIC at 33%

LOWEST RANKING GROUPS:

MALE

BLACK at 0%
WHITE at 0%

FEMALE

BLACK at 0%
WHITE at 0%
OTHER at 0%

San Jose/Evergreen Community College District Longitudinal Tracking System

EVERGREEN VALLEY COLLEGE

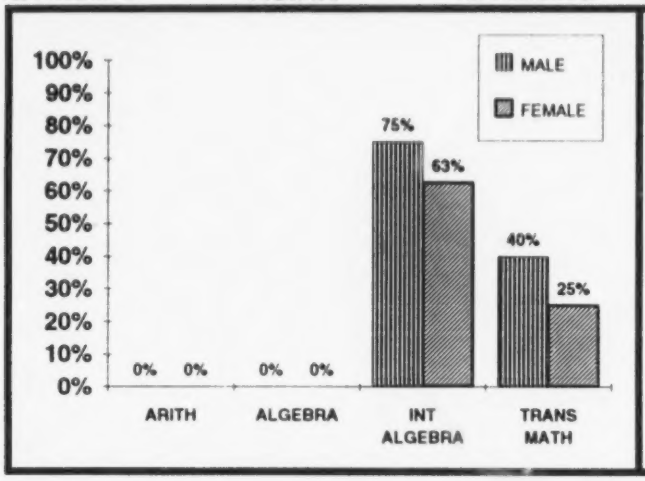
PERSISTENCE OF NEW COLLEGE STUDENTS

Students with no previous college experience who STARTED IN INT ALGEBRA FALL 1988

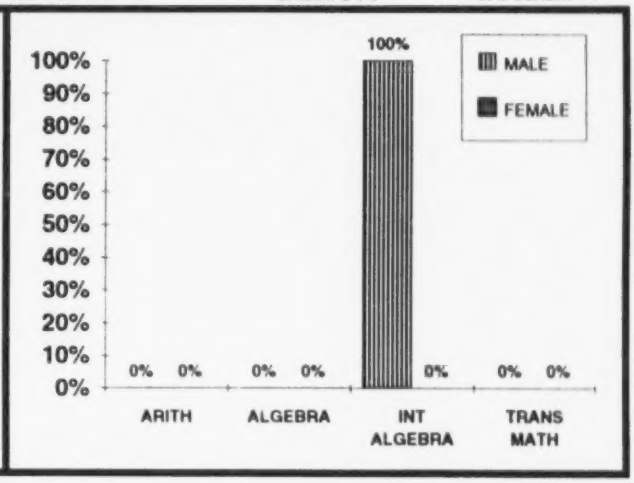
CUMULATIVE 4TH SEMESTER DATA (Spring 1992)

BY BENCHMARK ETHNICTY AND GENDER

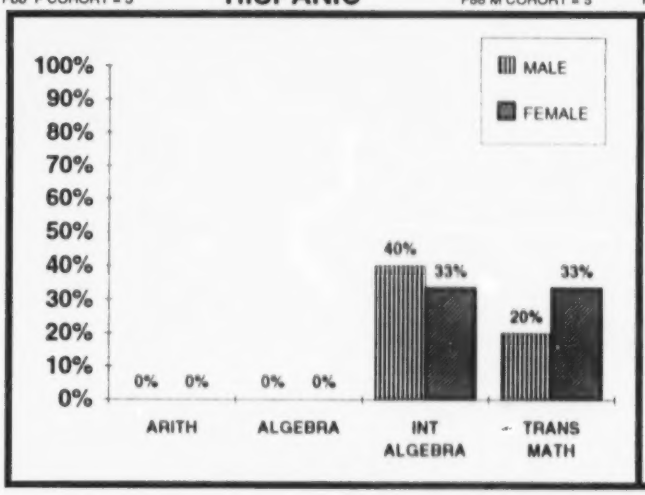
F88 F COHORT = 8 **ASIAN** F88 M COHORT = 20



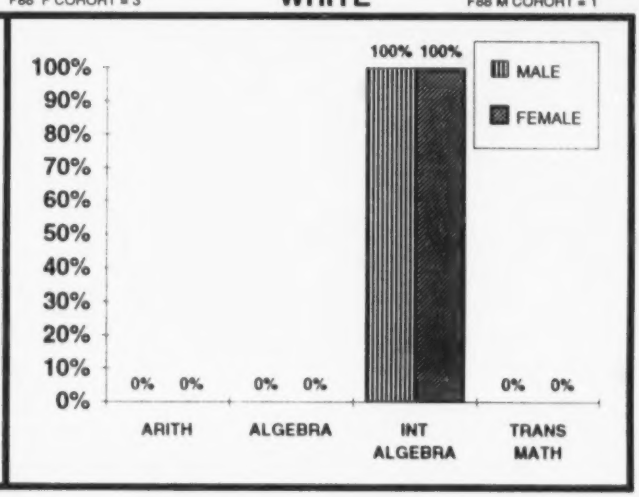
F88 F COHORT = 0 **BLACK** F88 M COHORT = 1



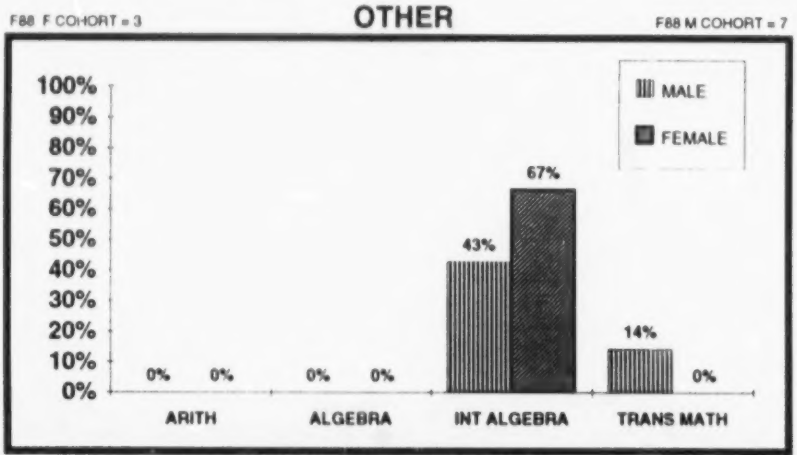
F88 F COHORT = 3 **HISPANIC** F88 M COHORT = 5



F88 F COHORT = 3 **WHITE** F88 M COHORT = 1



F88 F COHORT = 3 **OTHER** F88 M COHORT = 7



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Low numbers necessitate caution in interpreting data.

EVERGREEN VALLEY COLLEGE

PERSISTENCE OF NEW COLLEGE STUDENTS

Students with no previous college experience who STARTED IN INT ALGEBRA FALL 1988

from
INT ALGEBRA
through
TRANSFER LEVEL MATH

SORTED FROM HIGH TO LOW

CUMULATIVE NUMBER AND PERCENT*, 4TH SEMESTER DATA

BY ETHNICITY AND GENDER

INT ALGEBRA, FALL 1988 Cohort = 51

Low numbers necessitate caution in interpreting data.

FALL 1988 - SPRING 1992					SORTED HIGH TO LOW			
ETHNIC GROUP	FALL 1988 COHORT	S92 #	S92 %		ETHNIC GROUP	FALL 1988 COHORT	S92 #	S92 %
IND M	1	0	0%		ASN M	17	8	47%
IND F	0	0	0%		HSP F	3	1	33%
FIL M	1	0	0%		UNK F	3	1	33%
FIL F	1	0	0%		ASN F	7	2	29%
BLK M	1	0	0%		HSP M	5	1	20%
BLK F	0	0	0%		OTH M	6	1	17%
MID M	0	0	0%		WHT F	3	0	0%
MID F	0	0	0%		OTH F	3	0	0%
PAC M	2	0	0%		UNK M	3	0	0%
PAC F	0	0	0%		PAC M	2	0	0%
ASN M	17	8	47%		IND M	1	0	0%
ASN F	7	2	29%		FIL M	1	0	0%
HSP M	5	1	20%		FIL F	1	0	0%
HSP F	3	1	33%		BLK M	1	0	0%
WHT M	1	0	0%		WHT M	1	0	0%
WHT F	3	0	0%		IND F	0	0	0%
OTH M	6	1	17%		BLK F	0	0	0%
OTH F	3	0	0%		MID M	0	0	0%
DCL M	0	0	0%		MID F	0	0	0%
DCL F	0	0	0%		PAC F	0	0	0%
UNK M	3	0	0%		DCL M	0	0	0%
UNK F	3	1	33%		DCL F	0	0	0%

*Percentages in this table differ from other tables in this report because this table includes Unknown and Decline to State categories.